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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/063,333	04/20/1998	MICHAEL D. ELLIS	UV-44	4270

7590 11/07/2002

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EXAMINER

BROWN, RUEBEN M

ART UNIT	PAPER NUMBER
2611	10

DATE MAILED: 11/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/063,333	ELLIS ET AL.
	Examiner Brown M. Reuben	Art Unit 2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-78 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a)  The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

*Response to Arguments*

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

*Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-4, 23-36, 39-40, 59 & 65-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Hawkins, (U.S. Pat # 6,005,561).

Considering claim 1, the amended claimed interactive EPG system in which an interactive EPG is implemented on user equipment comprising, memory in the user equipment for storing the EPG is met by Hawkins, (col. 12, lines 25-35 & col. 18, lines 20-22). The claimed means for receiving information from a remote source on the amount of information for the interactive EPG to use to be stored reads on the table of media objects transmitted to the user terminal, see Fig. 5-6 & Fig. 8. The storage requirement for the EPG file is transmitted to the set top terminal. Hawkins discloses for instance in Fig. 8 that the EPG may require 12.1 MB of memory, also see col. 19, lines 25-45.

As for the claimed means for adjusting the amount of memory used by the interactive EPG guide to store the EPG in response to the received information, this feature is inherently met by the operation of Hawkins. Each particular instance that the EPG is downloaded, may require a different memory allocation, and therefore the user terminal adjusts to store whatever amount of EPG is received, at least within the range of overall storage space that is available.

Considering claim 2, Hawkins teaches that the EPG data may include a variety of parameters, such as start time, duration description, category, rating, part sequence, etc., which reads on the claimed feature of storing different categories of the EPG data in memory. As for the additionally claimed feature of reallocating memory among the different categories of EPG data when the amount of memory used to store the EPG data is adjusted, Hawkins discusses several algorithms for adjusting the memory used to store EPG data. In particular, it is disclosed

that in order to save memory space, the EPG data may be reduced, i.e., a smaller subset of categories of EPG may be saved instead of the full complement of associated data, see col.19, lines 51-65 & col. 20, lines 2-15. This technique reads on the reallocation of memory. When memory is not a problem the whole complement of associated data is stored, however when there may not be enough memory, then some of the available memory is reallocated from the associated categories of EPG, to the smaller subset of data.

Considering claims 3 & 29, the claimed elements of an interactive TV program guide system that correspond with subject matter rejected above in claim 1, are likewise treated. As for the additional claimed feature of reallocating the memory based on information in a database configuration record, this reads on Fig. 8 of Hawkins.

Considering claims 4, 40 & 66, the claimed TV distribution facility reads on the headend of Hawkins.

Considering claims 23, 59 & 65, the claimed elements of an interactive TV program guide system that correspond with subject matter rejected above in claim 1, are likewise treated. As for the additional claimed feature of receiving information from a remote source defining a new memory configuration, and reconfiguring the memory to accommodate the EPG data according the new memory configuration, see col. 19, lines 45-65.

Considering claims 24-28 the claimed feature read on the EPG data discussed in Hawkins, see col. 19, lines 20-67.

Considering claims 30-35, see Hawkins col. 19.

Considering claim 36, see col. 20, lines 4-10.

Considering claims 39, the claimed elements of an interactive TV program guide system that correspond with subject matter rejected above in claim 3, are likewise treated. The additional claimed feature of receiving information on the amount of memory available for the interactive EPG to use to store the EPG data reads on Fig. 8 of Hawkins that discloses the amount of memory, col. 19, lines 45-60.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-22, 37-38, 41-58, 60-64 & 67-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins.

Considering claims 5-20, 41-54, 56, 58, 60-64 & 67-72, Official Notice is taken that numerous memory allocation algorithms were well known in the art at the time the invention was made. It would have been obvious for one of ordinary skill in the art at the time the invention was made to operate Hawkins in a manner wherein EPG category records are reallocated, at least for the benefit of more efficiently utilizing available memory.

Considering claims 21 & 57, the claimed elements of an interactive TV program guide system that correspond with subject matter rejected above in claim 1, are likewise treated. As for the additional claimed feature of wherein the program guide corresponds to a channel line-up, this feature is necessarily included in EPG technology. As for the additionally claimed means for determining an amount of memory available for each different categories of new channels, wherein the adjusting is based upon memory that is determined to be available, Hawkins discusses several algorithms for reducing the memory required to store the EPG, in the event that the EPG is larger than the memory capacity of the user terminal, col. 19, lines 46-50. Therefore this passage suggests that the system in Hawkins includes some manner of determining the available memory of the user terminal. Since this feature is not explicitly taught by Hawkins, examiner takes Official Notice that at the time the invention was made, it was well known in the art to maintain a status of the available memory in memory storage devices. It would have been

obvious for one of ordinary skill in the art at the time the invention was made, to modify Hawkins with the well-known technique of maintaining a status of the amount of available memory at least for the desirable purpose of determining whether there is enough memory available to store an incoming data item.

Considering claims 22 & 55, the claimed elements of an interactive TV program guide system that correspond with subject matter rejected above in claim 1, are likewise treated. The additional claimed feature of wherein the program guide corresponds to a channel line-up, this feature is necessarily included in EPG technology. As for the additional claimed feature of detecting a channel in the TV channel line-up, Hawkins teaches that a variety of changes may be made to EPG data file to be stored at a user terminal, see col. 19 & col. 20. Official Notice is taken that at the time the invention was made, it was known in the art to detect a difference in the data items to be stored in a terminal. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to operate Hawkins in a manner wherein the specific items stored in known, at least for the benefit of displaying an updated channel-guide to the TV viewer's screen, so that the viewer is accurately informed of the available channels.

Considering claims 37-38, the claimed elements of an interactive TV program guide system that correspond with subject matter rejected above in claim 3, are likewise treated. As for the additional claimed feature of receiving information from a remote source on the amount of memory available to store EPG data, Official Notice is taken that at the time the invention was made, it was known in the art, to maintain a master record of capabilities of remote devices at a

main facility. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to operate Hawkins in a manner wherein the user terminals receive information regarding their memory, at least for the known advantage of reducing the amount of calculating overhead needed for the user terminals.

Considering the newly added claims 73-78, the instant claimed recite subject matter discussed above in the rejection of claim 21, 22, 37, 55 & 57, and are likewise treated. The newly added claims add the new feature of control circuitry in the TV equipment, which reads on the control circuitry within the user terminal of Hawkins.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A) Capps, Takanao Teach various memory reallocation techniques.
  
- B) Coleman Teaches transmission and storage of EPG, based upon daily or weekly usage.
  
- C) Yamaguchi Teaches memory reallocation according to various stored programs.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications intended for entry)

**Or:**

(703) 872-9314 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brown M. Reuben whose telephone number is (703) 305-2399. The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown

*Andrew Faile*  
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